Official

Attorney's Docket No.:10559-158001
Appl. No. 09/539,638
Amdt. dated July 22, 2003
Reply to Office Action of May 22, 2003

In the claims:

Sub B'

Claim 1 (currently amended): A method comprising:

generating data associated with a source video sequence, at least a first body of data being sufficient to permit generation of a first viewable video sequence of lesser quality than is represented by the source video sequence, and at least a second body of data being sufficient to enhance the quality of the first viewable video sequence generated from the first body of data, and

adjusting the second body of data to give transmission priority to ~~different~~ units of the second body of data, according to the amount of detail within the units to provide priority to the units which have more visual impact.

Claim 2 (original): The method of claim 1, wherein the units of the second bodies of data include a block of video data.

Claim 3 (currently amended): The method of claim 1, further comprising determining a detail by processing the data with a discrete cosine transform which produces coefficients,

the amount of detail corresponding to the ~~coefficients of the~~ higher-frequency terms within said coefficients.

Claim 4 (currently amended): The method of claim 3, further comprising giving generally higher transmission priority to lower-frequency terms of said coefficients and generally lower transmission priority to higher-frequency terms.

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Claim 5 (original): The method of claim 1, further comprising determining a transmission priority according to a frequency weighting matrix.

Claim 6 (original): The method of claim 1, further comprising determining a transmission priority according to an amount of data lost in the first body of data during the first body's generation.

Claim 7 (original): The method of claim 1, further comprising, following reception of the second body of data, undoing the operation that adjusted the second body of data.

Claim 8 (currently amended): An article comprising a computer-readable medium which stores computer-executable instructions, the instructions causing a computer to:

generate data associated with a source video sequence, at least a first body of data being sufficient to permit generation of a viewable video sequence of lesser quality than is represented by the source video sequence, and at least a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, and

adjust the second body of data to give transmission priority to different units of the second body of data, according to the amount of detail within the units to provide priority to the units which have more visual impact.

Claim 9 (original): The article of claim 8, wherein the units of the second bodies of data include a block of video data.

Claim 10 (currently amended): The article of claim 8, the instructions further causing the computer to determine a detail by processing the data with a discrete cosine transform which produces coefficients, the amount of detail corresponding to the

~~coefficients of the~~ higher-frequency terms within said coefficients.

Claim 11 (original): The article of claim 10, the instructions further causing the computer to give generally higher transmission priority to lower-frequency terms and generally lower transmission priority to higher-frequency terms.

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Claim 12 (original): The article of claim 8, the instructions further causing the computer to determine a transmission priority according to a frequency weighting matrix.

Claim 13 (original): The article of claim 8, the instructions further causing the computer to determine a transmission priority according to an amount of data lost in the first body of data during the first body's generation.

Claim 14 (original): The article of claim 8, the instructions further causing the computer, following reception of the second body of data, to undo the operation that adjusted the second body of data.

Claim 15 (currently amended): The method for encoding a video sequence of pictures, comprising:

applying lossy encoding to the sequence of pictures to produce a first body of data being sufficient to permit generation of a viewable video sequence of lesser quality than is represented by the ~~source~~ video sequence,

deriving a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, and

adjusting the second body of data to give transmission priority to different units of the second body of data, according to the amount of detail within the units to provide priority to the units which have more visual impact.

Claim 16 (currently amended): The method of claim 15, further comprising determining the detail by processing the data with a discrete cosine transform which produces coefficients, the amount of detail corresponding to the ~~coefficients of the~~ higher-frequency terms within said coefficients.

Claim 17 (original): The method of claim 16, further comprising giving generally higher transmission priority to

lower-frequency terms and generally lower transmission priority to higher-frequency terms.

Claim 18 (original): The method of claim 15, further comprising determination of transmission priority according to a frequency weighting matrix.

Claim 19 (original): The method of claim 15, further comprising determination of transmission priority according to the amount of data lost in the first body of data during the first body's generation.

Claim 20 (original): The method of claim 15, further comprising adjusting the second body of data in a manner that the adjustment may be undone by a decoder.

Claim 21 (currently amended): An article comprising a computer-readable medium which stores computer-executable instructions for encoding a video sequence of pictures, the instructions causing a computer to:

apply lossy encoding to the sequence of pictures to produce a first body of data being sufficient to permit generation of a

viewable video sequence of lesser quality than is represented by the ~~source~~ video sequence,

derive a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data, and

adjust the second body of data to give transmission priority to different units of the second body of data, according to the amount of detail within the units to provide priority to the units which have more visual impact.

Claim 22 (currently amended): The article of claim 21, the instructions further causing the computer to determine the detail by processing the data with a discrete cosine transform which produces coefficient, the amount of detail corresponding to the ~~coefficients of the~~ higher-frequency terms within said coefficients.

Claim 23 (original): The article of claim 22, the instructions further causing the computer to give generally higher transmission priority to lower-frequency terms and generally lower transmission priority to higher-frequency terms.

Claim 24 (original): The article of claim 21, the instructions further causing the computer to determine of transmission priority according to a frequency weighting matrix.

Claim 25 (original): The article of claim 21, the instructions further causing the computer to determine of transmission priority according to the amount of data lost in the first body of data during the first body's generation.

Claim 26 (original): The article of claim 21, the instructions further causing the computer to adjust the second body of data in a manner that the adjustment may be undone by a decoder.

Claim 27 (currently amended): A system for encoding and decoding a video sequence of pictures, comprising:

an encoder capable of

generating a first body of data sufficient to permit generation of a viewable video sequence of lesser quality than is represented by the ~~source~~ video sequence,

generating a second body of data being sufficient to enhance the quality of the viewable video sequence generated from the first body of data,

adjusting the second body of data to give transmission priority to different units of the second body of data, according to the amount of detail within the units, and

a decoder capable of undoing the adjustment made by the encoder.

Claim 28 (original): The system of claim 27, wherein the decoder is further capable of performing decoding operations on the first body of data, including variable length decoding, inverse quantization, inverse scanning, inverse discrete cosine transformation or motion compensation.

Claim 29 (original): The system of claim 27, wherein the decoder is further capable of performing decoding operations on the second body of data, including variable length decoding, inverse quantization or inverse discrete cosine transformation.

Claim 30 (original): The system of claim 27, wherein the decoder is further capable of combining the first body with the second body of data.